

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

**ORDER NO. 2000-90**  
NPDES NO. CAG919001  
GENERAL  
WASTE DISCHARGE REQUIREMENTS  
FOR  
TEMPORARY GROUNDWATER EXTRACTION AND SIMILAR WASTE DISCHARGES  
TO  
SAN DIEGO BAY AND STORM DRAINS OR OTHER CONVEYANCE SYSTEMS  
TRIBUTARY THERETO

**TABLE OF CONTENTS**

Findings.....	2
A. Prohibitions.....	11
B. Discharge Specifications.....	12
C. Receiving Water Limitations.....	14
D. Provisions.....	17
E. Reporting Requirements.....	27
F. Notifications.....	33
G. Endnotes for Order No. 2000-90.....	35
Monitoring and Reporting Program No. 2000-90	
A. Purpose.....	40
B. Monitoring Provisions.....	40
C. Treatment System Status.....	42
D. Discharge Monitoring-Long Term.....	42
E. Discharge Monitoring-Short Term.....	44
F. Discharge monitoring-Sewer replacement.....	45
G. Biomonitoring.....	46
H. Toxicity Reduction Evaluation (TRE) .....	46
I. Receiving Water Monitoring .....	47
J. Sediment Monitoring.....	47
K. Annual Summary of Data.....	47
L. Provisions.....	47
M. Reporting Frequency.....	48
Endnotes for Monitoring and Reporting Program Order No. 2000-90.....	49
Attachment A-Enclosed Bays and Estuaries Policy Discharge Prohibitions.....	50
Attachment B- Basin Plan Waste Discharge Prohibitions.....	51
Attachment C - Standard Provisions.....	53

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. On April 23, 1990, this Regional Board adopted Order No. 90-31, National Pollutant Discharge Elimination System (NPDES) No. CA0108707, "General Waste Discharge Requirements for Groundwater Dewatering Waste Discharges to San Diego Bay or Tributaries Thereto, San Diego County." Order No. 90-31 and Technical Change Order No. T-1 thereto, contain an expiration date of April 23, 1995.
2. On September 26, 1991, the State Water Resources Control Board (SWRCB) adopted Order No. WQ91-10 which amended Regional Board Order No. 90-31.
3. On May 16, 1995, this Regional Board adopted Order No. 95-25, NPDES No. CAG919001, "General Waste Discharge Requirements for Groundwater Extraction and Similar Waste Discharges to San Diego Bay and Storm Drains or Other Conveyance Systems Tributary Thereto, San Diego County." Order No. 95-25 superseded Order No. 90-31.
4. NPDES Regulations, 40 CFR 122.28 provides for the issuance of general permits to regulate discharges of waste which result from similar operations, are the same type of waste, require the same effluent limitations, require similar monitoring, and are more appropriately regulated under a general permit rather than individual permits.
5. This Order establishes a general permit regulating the discharge of groundwater extraction waste discharges to San Diego Bay from all construction dewatering, and groundwater remediation projects. All discharge flow rate volumes are subject to the terms and conditions of this Order.
6. Groundwater extraction waste discharges pose the threat of discharging pollutants which may be present in groundwaters surrounding San Diego Bay as a result of many past activities, including leaking underground storage tanks and fuel lines, surface spills of wastes, and past use of liquid waste impoundments.
7. The capacity of San Diego Bay to assimilate pollutants is limited. In order to protect the beneficial uses of San Diego Bay waters from excessive loading of pollutants as a result of escalating numbers of waste discharges to San Diego Bay, **this Order prohibits groundwater extraction waste discharges to San Diego Bay from new permanent<sup>1</sup> groundwater extraction operations.** The prohibition of discharges from new permanent groundwater extraction operations to San Diego Bay will reduce the potential number and duration of discharges to San Diego Bay as intended by the federal Clean Water Act (Section 101(a)(1)) and the Water Quality Control Policy for Enclosed Bays and Estuaries of California.

8. All groundwater extraction waste discharges currently regulated by Regional Board Order No. 95-25 shall be regulated under the terms and conditions of this Order. As of the date of adoption of this Order, the three existing Permanent Groundwater Extraction Discharges enrolled under this general permit are as follows:
  1. City of San Diego, San Diego Convention Center permanent dewatering system
  2. Embassy Suites Hotel (San Diego) permanent dewatering system; and
  3. Great American Plaza (San Diego) permanent dewatering system
9. In order to minimize potential impacts from groundwater extraction waste discharges on the beneficial uses of San Diego Bay, this Order requires the application of best available technology economically achievable (BAT)<sup>2</sup> for the removal of organic pollutants commonly found in petroleum polluted groundwaters. Discharges in compliance with BAT-based effluent limitations contained in Discharge Specification No. B.I of this Order are not expected to have a measurable impact on the beneficial uses of San Diego Bay as a result of the discharge of petroleum related compounds since the effluent limitations for these compounds are equal to the practical quantitation level. Such compounds will essentially be nondetectable in discharges of groundwater dewatering waste to San Diego Bay.
10. Any discharge of untreated groundwater to San Diego Bay threatens to cause or contribute to excursions above narrative water quality objectives contained in the Basin Plan as a result of the potential discharge of petroleum related compounds, solvents, and metals. On May 26, 1989, the United States Environmental Protection Agency, (USEPA) enacted revisions to NPDES program regulations (40 CFR 122). When a proposed discharge of a compound or chemical threatens to cause or contribute to an excursion above a State narrative water quality standard and a numeric water quality standard for the specific chemical has not been established, the NPDES program regulations require<sup>3</sup> the Regional Board to 1) establish effluent limitations using a proposed State water quality objective or standard or an explicit State policy or regulation interpreting its narrative water quality objective which will protect and maintain water quality and designated beneficial uses of the receiving water, 2) establish effluent limitations on a case-by-case basis, using USEPA's water quality criteria published under 307(a) of the federal Clean Water Act, or 3) establish effluent limitations on an indicator parameter for the pollutants of concern.
11. Since water quality criteria for many petroleum hydrocarbon compounds have not been proposed or established by the State or the USEPA, this Order establishes effluent limitations for "indicator constituents" of complex mixtures of petroleum related compounds such as gasoline and diesel fuels. This Order uses benzene, toluene, ethylbenzene, xylene (BTEX) and total petroleum hydrocarbons (TPH) as "indicator constituents" for petroleum related compounds. This Order establishes effluent limitations and monitoring requirements for BTEX and TPH which will ensure that volatile petroleum related compounds will be removed from the waste stream. This Order also establishes effluent limitations and monitoring requirements for indicator constituents of diesel fuels (TPH-diesel)<sup>5</sup> commonly found in polluted groundwaters.

12. It has been demonstrated that volatile pollutants (e.g., benzene, toluene, ethylbenzene, xylene, etc.) and many other organic pollutants in groundwater can be reduced to less than current analytical detection limits (0.5 to 10 micrograms per liter ( $\mu\text{g/L}$ )) in effluents using available standard treatment technologies<sup>4,6</sup>, Section 402(a)(1) of the Clean Water Act authorizes the issuance of best available technology (BAT)<sup>2</sup> effluent limitations in NPDES permits using best professional judgement (BPJ). Thus, BAT (best available technology economically achievable) for the removal of organic compounds is the basis for effluent limitations for BTEX and other volatile hydrocarbons, and base/neutral compounds (volatile hydrocarbons and base/neutral compounds are listed in 40 CFR 136) in Discharge Specification No. B.I of this Order. Establishing an effluent limitation of 5  $\mu\text{g/L}$  for benzene ensures that other volatile organic compounds of concern will be equally limited as well since benzene is more water soluble and less volatile than the majority of the volatile compounds of concern and has a lower adsorption capacity for granular activated carbon. Therefore, benzene is usually the most difficult compound to remove from a waste stream - the remaining compounds of concern will be sufficiently removed if benzene is removed from the waste stream, whether treatment consists of aeration, adsorption, or a combination of the two processes.
13. On January 1, 1998, Senate Bill (SB) 521 was passed. SB521 adds language to the Health & Safety Code which is applicable to leaking underground storage tanks as follows: "Section 25299.37.1. No closure letter pursuant to this chapter shall be issued unless the soil or groundwater, or both, where applicable, at the site have been tested for Methyl Tertiary Butyl Ether (MTBE) and the results of that testing are known to the Regional Board." Subsequently, on February 20, 1998, the San Diego Regional Board, Site Mitigation & Cleanup Unit, issued written notification to interested parties of Mandatory MTBE Sampling For Underground Storage Tank (UST) Site Closures-Senate Bill (SB) 521. The February 20, 1998 notification specifies that "For ground water impacted sites or soil sites that may threaten ground water, both soil and ground water sampling and analysis for MTBE will be required." The Porter-Cologne Water Quality Control Act (January 1, 2000), Sections 13272.1 and Section 13285 address discharges of MTBE. The California Department of Health Services (DHS) last update (March 9, 2000) of California's Maximum Contaminant Levels for MTBE states the following:
- "DHS proposed a 13  $\mu\text{g/L}$  primary MCL for MTBE in September 1999, and the 45 day public comment period closed on November 1, 1999. DHS reviewed the comments it received, and made no changes in the proposed regulation subsequent to public comments. The MTBE regulation package is under its 30 day review at the Office of Administrative Law (OAL). If OAL approves the regulation, it will be forwarded to the Secretary of State, and become effective 30 days later (May 18, 2000). Until the primary MCL is adopted, DHS will continue to use its 13  $\mu\text{g/L}$  action level to protect against health effects associated with MTBE in drinking water. The secondary MCL for MTBE is 5  $\mu\text{g/L}$ , effective January 7, 1999".

14. On July 16, 1998, USEPA granted approval for the San Diego Unified Port District to use EPA Method 1638, and EPA Method 1640 (Clean Technologies) for analysis of metals for NPDES compliance samples taken from the San Diego Convention Center's groundwater extraction waste discharge. The Regional Board concurred with this approval. The groundwater discharge from the San Diego Convention Center is blend of freshwater from the groundwater table, and salt water infiltration from San Diego Bay. The salinity of the Convention Center discharge ranges between 27 and 35 parts per million (ppm). The 1638/1640 Methods are appropriate for saline samples. Prior to the approval, the San Diego Unified Port District used EPA Method 200.7, which is appropriate for freshwater samples. The 200.7 Method yielded results which caused the Convention Center discharge to be in noncompliance with its permit limits most of the time. Since the Port District began use of Methods 1638/1640, the Convention Center discharge has been in compliance with its permit limits most of the time.  
  
Future enrollees under this general permit, that are in close proximity of San Diego Bay, may encounter saline groundwater, in which case the use of Methods 1638/1640 would be appropriate for the analysis of metals.
15. On April 28 2000, the USEPA promulgated numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California. USEPA promulgated this rule based on the administrator's determination that the numeric criteria are necessary in the State of California to protect human health and the environment. USEPA promulgated this rule to fill a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, the State of California has been without numeric water quality criteria for many priority toxic pollutants as required by the Clean Water Act, necessitating this action by USEPA. These Federal criteria are legally applicable in the State of California for inland surface waters, enclosed bays and estuaries for all purposes and programs under the Clean Water Act.
16. On June 17, 1999 the State Water Resources Control Board adopted the Consolidated Toxic Hot Spot Cleanup Plan (Consolidated Plan) required under Bay Protection and Toxic Cleanup Program (CWC Section 13395). The Consolidated Plan listed known toxic hot spots, including several located in San Diego Bay. The Consolidated Plan also requires Regional Boards to reevaluate waste discharge requirements for those discharges associated with each known toxic hot spot that can reasonably be expected to cause or contribute to the creation and maintenance of the known toxic hot spot. The San Diego Regional Board finds that discharges from groundwater extraction (dewatering) activities may contribute to the pollution present at the toxic hot spots listed in the Consolidated Plan. In the event that future groundwater extraction waste discharges are proposed to an area of San Diego Bay that is designated as a toxic hot spot, staff will at that time, review both the Discharge Specifications and the Monitoring and Reporting Programs for appropriate modification(s).
17. In establishing effluent limitations based on BAT, the Regional Board has taken into

consideration the following factors:

- a. The appropriate technology for the category or class of which the discharger is a member;
  - b. The age of equipment and facilities involved;
  - c. The process employed;
  - d. The engineering aspects of the application of various types of control techniques;
  - e. Process changes;
  - f. The cost of achieving such effluent reduction;
  - g. Non-water quality environmental impact (including energy requirements); and
  - h. Known and potential groundwater contaminants in the vicinity of groundwater extraction operations covered under this Order.
18. Discharge specifications contained in this Order for settleable solids, total suspended solids, hydrogen sulfide, and toxicity are based on best professional judgement (BPJ). Discharge specifications for pH, and total residual chlorine (TRC), metals, polychlorinated biphenyls (PCB), and phenols (chlorinated and nonchlorinated) were obtained from Tables A and B of the Water Quality Control Plan for Ocean Waters of California, 1997. Effluent limitations for TRC, metals, PCB, and phenols are equal to the water quality objectives listed in the Ocean Plan for each constituent since initial dilution is assumed to equal zero. It follows that since groundwater dewatering waste discharged to San Diego Bay must not contain pollutant concentrations in excess of water quality objectives prior to any dilution (mixing with receiving waters), the discharge of groundwater extraction waste in compliance with effluent limitations cannot cause excursions above the receiving water quality criteria established in this Order.
19. The effluent limitation for solvents in this Order are identical to the water quality objectives for solvents in the revised Statewide Water Quality Control Plan for Enclosed Bays and Estuaries of California (EBE Plan), adopted by the SWRCB on November 19, 1992 and since rescinded. As explained in the draft Functional Equivalent Document for the revised EBE Plan, dated March 27, 1992, water quality objectives for these constituents were based on USEPA Section 304(a) human health criteria modified by incorporating updated cancer potencies and reference doses. Although the EBE Plan has been rescinded, the approach used to develop water quality objectives was technically sound. Therefore, effluent limits for solvents identical to EBE Plan water quality objectives are included in this Order on the basis of best professional judgement (BPJ).

20. **The daily maximum discharge flowrate limitation for each discharge will be specified in the discharge authorization letter from the Executive Officer<sup>7</sup>.** Mass emission rate limitations will be determined using the authorized discharge flowrate and effluent concentration limitations specified in Discharge Specification B.I of this Order.
21. This general NPDES permit does not preempt or supersede the authority of other State or local agencies to prohibit, restrict, or control the discharge of groundwater extraction waste discharges from facilities subject to this permit in any manner subject to their authority. This Order does not apply to discharges regulated by a municipal stormwater permit. Discharges of groundwater via a storm drain conveyance system during dry weather has the potential to carry pollutants typically found in urban runoff (ie: coliform, heavy metals, pesticides, herbicides, oil & grease, petroleum products), that would normally remain in the storm drain system until the first significant rain event of the wet season, to a water of the state, thus creating a nuisance condition.
22. To obtain authorization to discharge under the terms and conditions of this Order, an applicant enrollee is required to include in the application the following information on the conveyance facilities used to route extracted groundwaters to San Diego Bay: 1) location and description of storm drain(s) or conveyance system(s) used to route discharge to San Diego Bay; 2) name of public agency or entity having jurisdiction of storm drain(s) or conveyance system(s) used to route discharge to San Diego Bay; and 3) proof of notification to the public agency or entity responsible for the storm drain(s) or conveyance system(s) of the discharge of extracted groundwater.
23. The SWRCB adopted the Water Quality Control Policy for Enclosed Bays and Estuaries of California (Bays and Estuaries Policy) on May 16, 1974. The policy established water quality principles, guidelines, effluent quality requirements and prohibitions to govern the disposal of wastes in the enclosed bays and estuaries of California.
24. Discharges of groundwater extraction waste could potentially conflict with Chapter I., Item Nos. C. 1 and 2 (Principals for Management of Water Quality in Enclosed Bays and Estuaries) and Discharge Prohibition No. 5 of the Bays and Estuaries Policy if such discharges contain pollutants in sufficient concentrations to adversely impact the beneficial uses of San Diego Bay. However, the discharge of groundwater extraction waste as limited by this Order does not conflict with the Water Quality Control Policy for the Enclosed Bays and Estuaries of California provided that each discharge of groundwater extraction waste complies with Discharge Specification No. B.I of this Order and the discharge is limited in duration.
25. The SWRCB adopted a revised Water Quality Control Plan for Ocean Waters of California (Ocean Plan) on July 23, 1997. The Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:
  - a. Industrial water supply;

- b. Navigation;
- c. Aesthetic enjoyment;
- d. Water contact recreation;
- e. Non-contact water recreation;
- f. Ocean commercial and sport fishing;
- g. Mariculture;
- h. Preservation and enhancement of Areas of Special Biological Significance;
- i. Preservation and enhancement of rare and endangered species;
- j. Marine habitat;
- k. Fish migration;
- 1. Fish spawning; and
- m. Shellfish harvesting.

In order to protect the above beneficial uses, the Ocean Plan establishes water quality objectives (for bacteriological, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

- 26. Beneficial uses of San Diego Bay are similar to those of the ocean waters of the State. In order to protect the beneficial uses of San Diego Bay, discharge specifications and receiving water quality limitations, derived from Tables A and B of the Ocean Plan by applying the calculations and procedures found in the Ocean Plan, have been included in this Order.
- 27. The Comprehensive Water Quality Control Plan, San Diego Basin (9) (hereinafter Basin Plan) was adopted by this Regional Board on September 8, 1994 and subsequently approved by the SWRCB on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by this Regional Board and adopted by the SWRCB. The Basin Plan designates beneficial uses and narrative and numerical water quality objectives, and prohibitions which are applicable to the discharges regulated under this Order.
- 28. The Basin Plan identifies the following beneficial uses of San Diego Bay waters to be protected:
  - a. Industrial service supply;
  - b. Navigation;
  - c. Contact water recreation;
  - d. Non-contact water recreation;
  - e. Ocean Commercial and sport fishing;
  - f. Preservation of Rare, threatened or endangered species
  - g. Marine habitat;
  - h. Fish Migration
  - i. Shellfish harvesting
  - j. Fish Spawning



- k. Wildlife habitat
- l. Preservation of Areas of Special Biological Significance
- m. Mariculture

29. The Basin Plan contains prohibitions applicable to surface waters. The applicable prohibitions of the Basin Plan have been incorporated herein as attachment A.
30. Pursuant to 40 CFR 131.12 and State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California (collectively "antidegradation policies"), the Regional Board shall ensure that any increase in pollutant loading to a receiving water meets the requirements stated in the foregoing policies.

At a minimum, permitting actions shall be consistent with the following:

- a. Existing instream water uses and the level of water quality necessary to protect existing beneficial uses shall be maintained and protected;
  - b. Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, the quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economical or social development in the area in which the waters are located;
  - c. Where high quality waters constitute an outstanding national resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected; and
  - d. In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with Section 316 of the Clean Water Act.
31. The Regional Board, in establishing the requirements contained herein, has taken into consideration the requirements of State and Federal antidegradation policies and has determined that:
- a. The conditions and effluent limitations established in this order for groundwater extraction waste discharges to San Diego Bay ensure that the existing beneficial uses and quality of San Diego Bay waters will be maintained and protected;

- b. Allowing groundwater extraction waste discharges to San Diego Bay is necessary to accommodate economic development important to the people of the communities surrounding San Diego Bay;
  - c. San Diego Bay has not been designated an outstanding national resource water; and
  - d. Thermal discharges potentially impairing water quality are not authorized under the terms and conditions of this Order, thus, Section 316 of the Clean Water Act is not applicable.
32. Discharge criteria established under Sections 301, 302, 304, 306, 307, and 403 of the Clean Water Act (CWA), as amended (33 U.S.C. 1251 et seq.), are applicable to the discharges regulated by this order.
33. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to, the following:
- a. Beneficial uses to be protected and the water quality objectives reasonably required for that purpose;
  - b. Other waste discharges;
  - c. The need to prevent nuisance;
  - d. Past, present, and probable future beneficial uses of the waters under consideration;
  - e. Environmental characteristics of the waters under consideration;
  - f. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
  - g. Economic considerations; and
  - h. The need for developing housing within the region;
  - i. The need to develop and use recycled water.
34. This Order shall serve as a general National Pollutant Discharge Elimination System (NPDES) permit for groundwater extraction waste discharges to San Diego Bay and storm drains or other conveyance systems tributary thereto pursuant to Section 402 of the Clean Water Act, and amendments thereto.
35. The reissuance of this general permit is exempt from the requirement for preparation of

environmental documents under the California Environmental Quality Act (Public Resources Code, Division 13, Chapter 3, Section 21000 et seq.) in accordance with the California Water Code, Section 13389.

36. The Regional Board has notified all known interested parties of its intent to reissue the general NPDES permit for groundwater extraction waste discharges to San Diego Bay and has provided them with an opportunity to submit their written views and recommendations.
37. The Regional Board has, in a public meeting, heard and considered all comments pertaining to groundwater extraction waste discharges to San Diego Bay.

IT IS HEREBY ORDERED, that each authorized discharger<sup>7</sup> (hereinafter enrollee), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and the regulations adopted thereunder, shall comply with the following:

**A. PROHIBITIONS:**

1. The discharge of waste to areas designated by the SWRCB as being of special biological significance is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.
2. The discharge of groundwater extraction wastes from a specific site in excess of the flowrate specified in the authorization letter from the Executive Officer is prohibited unless the enrollee obtains a revised discharge authorization letter authorizing an increased flowrate.
3. The addition of pollutants to extracted groundwater to be discharged to San Diego Bay is prohibited. The only exception to this prohibition is that chemicals may be added to extracted groundwater to control biofouling in treatment systems, provided that extracted groundwater discharged to San Diego Bay meets the effluent limitations for such chemicals established by this Order and in the discharge authorization letter issued by the Executive Officer.
4. The discharge of groundwater extraction wastes to San Diego Bay is prohibited unless the required application and certification report for the discharge has been submitted to the Executive Officer and the Executive Officer has provided the enrollee with written authorization to initiate the discharge.
5. Discharges of waste from new permanent<sup>1</sup> groundwater extraction operations to San Diego Bay are prohibited.

6. The discharge of groundwater extraction wastes to San Diego Bay from a construction dewatering operation after the date of completion of construction of structures requiring construction dewatering is prohibited.
7. The discharge of groundwater extraction wastes to San Diego Bay from a groundwater remediation operation after the date groundwater has been remediated to the satisfaction of the Executive Officer is prohibited.
8. Compliance with Discharge Prohibitions as stated in the 1974 Bays and Estuaries Plan (Attachment No. A) is required as a condition of this Order.
9. Compliance with Discharge Discharge Prohibitions contained in the Basin Plan (Attachment B) is also required as a condition of this Order.
10. Discharges of wastes in a manner or to a location which have not been specifically authorized by this Order are prohibited.
11. The discharge of any radiological, chemical, or biological warfare agent, or high level radiological waste to the ocean is prohibited.
12. The dumping or deposition, from shore, of oil, garbage, trash, or other solid municipal, industrial, or agricultural waste directly into waters subject to tidal action or adjacent to waters subject to tidal action in any manner which may permit it to be washed into waters subject to tidal action is prohibited.
13. The dumping or deposition of chemical agents or explosives into waters subject to tidal action is prohibited.

## B. DISCHARGE SPECIFICATIONS<sup>8</sup>

1. The discharge of groundwater extraction waste from any site to San Diego Bay, or tributaries thereto within the tidal influence of San Diego Bay, containing pollutants in excess of the following effluent limitations is prohibited:

Constituent	Unit	6-Month Median	30-day Average	Daily Maximum	Instantaneous Maximum	Basis <sup>9</sup>
Settleable Solids	ml/L	---	1.0	---	3.0	BPJ <sup>10</sup>
Total Suspended Solids	mg/L	---	30.0	---	50.0	"
Hydrogen Sulfide	ug/L	---	2.0	4.0	10.0	BPJ <sup>10</sup>
Total Residual Chlorine (TRC) <sup>11</sup>	ug/L	2.0	---	8.0	60.0	OP <sup>9</sup>
pH	pH Units	Within the limits of 6.0 to 9.0 at all times				"
Benzene	ug/L	---	---	---	5.0	BPJ/BAT <sup>12</sup>
Ethylbenzene	ug/L	---	---	---	5.0	"

Toluene	ug/L	---	---	---	5.0	"
Xylene	ug/L	---	---	---	5.0	"
Total Petroleum Hydrocarbons	mg/L	---	---	---	0.5	"
Arsenic	ug/L	36.0	---	---	69.0	CTR <sup>9</sup>
Cadmium	ug/L	9.3	---	---	42.0	"
Chromium (hexavalent) <sup>13</sup>	ug/L	50.0	---	---	1100.0	"
Copper	ug/L	3.1	---	---	4.8	"
Lead	ug/L	8.1	---	---	210.0	"
Mercury	ug/L	0.94	---	---	1.8	"
Nickel	ug/L	8.2	---	---	74.0	"
Silver	ug/L	---	---	---	1.9	"
Zinc	ug/L	81.0	---	---	90.0	"
Cyanide	ug/L	1.0	---	---	1.0	"
Phenolic Compounds (non-chlorinated)	ug/L	30.0	---	120.0	300.0	OP <sup>9</sup>
Chlorinated Phenolics	ug/L	1.0	---	4.0	10.0	OP
Polychlorinated Biphenyls	ug/L	0.03	---	---	---	CTR <sup>9</sup>
1,1,2,2-tetrachloroethane (PCA)	ug/L	---	11.0	---	---	EBE <sup>12</sup>
1,1,1-trichloroethane (TCA)	mg/L	---	11.0	---	---	"
1,1,2-trichloroethane (TCA)	ug/L	---	42.0	---	---	"
1,2-dichloroethane	ug/L	---	130.0	---	---	"
tetrachloroethylene (PCE)	ug/L	---	6.9	---	---	"
trichloroethylene (TCE)	ug/L	---	92.0	---	---	"
vinyl chloride	ug/L	---	34.0	---	---	"
carbon tetrachloride	ug/L	---	3.8	---	---	"
Base/Neutral Organic Compounds <sup>14</sup>	ug/L	---	---	---	10.0	BPJ/BAT <sup>12</sup>
Acute Toxicity	TUa	---	---	---	0.59	BPJ <sup>10</sup>
Chronic Toxicity	TUc	---	---	1.0	---	"
Tributyltin (TBT)	ug/L	---	0.005	---	---	"
Total Coliform	MPN/100ml	---	---	---	1000.0	"
Fecal Coliform	"	---	---	---	200.0	"
Dissolved Oxygen (D.O.)	mg/L	---	---	---	>5.0	"

Note: ml/L = milliliters per liter, mg/L = milligrams per liter  
 µg/L = micrograms per liter, TUa = acute toxicity units  
 TUc = chronic toxicity units

2. Groundwater discharged to San Diego Bay must be essentially free of:
  - a. Material that is floatable or will become floatable upon discharge.
  - b. Settleable material or substances that form sediments which degrade<sup>15</sup> benthic communities or other marine life.
  - c. Substances that will accumulate to toxic levels in marine sediments or biota.
  - d. Substances that significantly<sup>16</sup> decrease the natural light to benthic communities and other marine life.

- e. Materials that result in aesthetically undesirable discoloration of San Diego Bay surface waters.
- 3. Groundwater discharged to San Diego Bay shall not cause natural water quality conditions to be altered in areas designated as being of special biological significance or areas that existing marine laboratories use as a source of seawater.
- 4. Groundwater discharged to San Diego Bay shall be discharged in such a manner as to provide maximum protection to marine environments.

**C. RECEIVING WATER LIMITATIONS<sup>17</sup>**

The discharge of groundwater extraction waste from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in San Diego Bay.

**1. Bacterial Characteristics**

**(1) Water-Contact Standards**

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (a) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (b) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

(2) Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface of San Diego Bay.
- c. Natural light shall not be significantly<sup>16</sup> reduced.
- d. The rate of deposition of solids and the characteristics of inert solids in San Diego Bay sediments shall not be changed such that benthic communities are degraded<sup>15</sup>.

3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly<sup>16</sup> increased above that present under natural conditions.
- d. The concentration of substances set forth in Discharge Specification B.I in marine sediments shall not be increased to levels which would degrade<sup>15</sup> indigenous biota.
- e. The concentration of organic materials in San Diego Bay sediments shall not be increased to levels which would degrade<sup>15</sup> marine life.
- f. Nutrient materials shall not cause objectionable aquatic growth or degrade<sup>15</sup>

indigenous biota.

#### 4. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded<sup>15</sup>.
- b. The natural taste, odor, and color of fish, shellfish<sup>18</sup>, or other aquatic resources used for human consumption shall not be altered.
- c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

#### 5. Radioactivity

Discharge of radioactive waste shall not degrade<sup>15</sup> marine life.

#### 6. Toxic Materials Limitations

Constituent	Unit	6-Month Median	Daily Maximum	Instantaneous Maximum
Total Residual Chlorine (TRC) <sup>11</sup>	µg/L	2.0	11.0	126.0
Benzene	µg/L	---	---	5.0
Ethylbenzene	µg/L	---	---	5.0
Toluene	µg/L	---	---	5.0
Xylene	µg/L	---	---	5.0
Arsenic	ug/L	36.0	---	69.0
Cadmium	ug/L	9.3	---	42.0
Chromium (hexavalent) <sup>13</sup>	ug/L	50.0	---	1100.0
Copper	ug/L	3.1	---	4.8
Lead	ug/L	8.1	---	210.0
Mercury	ug/L	0.94	---	1.8
Nickel	ug/L	8.2	---	74.0
Silver	ug/L	---	---	1.9
Zinc	ug/L	81.0	---	90.0
Cyanide	ug/L	1.0	---	1.0
Phenolic Compound (non-chlorinated)	µg/L	30.0	120.0	300.0
Chlorinated Phenolics	µg/L	1.0	4.0	10.0
1,1,2,2 tetrachloroethane(PCA)	ug/L	---	11.0	---
1,1,1-trichloroethane(TCA)	mg/L	---	11.0	---
1,1,2-trichloroethane(TCA)	ug/L	---	42.0	---
1,2-dichloroethane	ug/L	---	130.0	---
tetrachloroethylene(PCE)	ug/L	---	6.9	---
trichloroethylene(TCE)	ug/L	---	92.0	---
vinyl chloride	ug/L	---	34.0	---
carbon tetrachloride	ug/L	---	3.8	---



Base/Neutral Organic Compounds <sup>14</sup>	µg/L	---	---	10.0
Acute Toxicity Concentration	TUa	0.05	---	0.59
Chronic Toxicity Concentration	TUc	---	1.0	---

---

## D. PROVISIONS

1. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.
2. The enrollee must comply with all conditions of this Order and the authorization letter from the Executive Officer. Any permit noncompliance constitutes a violation of the Clean Water Act and the California Water Code and is grounds for enforcement action; for authorization letter termination or modification.
3. The enrollee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order and the authorization letter from the Executive Officer, including such accelerated or additional monitoring as may be necessary to determine the nature, and impact of the noncomplying discharge.
4. This Order or an authorization letter from the Executive Officer, may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - a. Violation of any terms or conditions of this Order or an authorization letter from the Executive Officer;
  - b. Obtaining this Order, or an authorization letter from the Executive Officer, by misrepresentation or failure to disclose fully all relevant facts;
  - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
  - d. A finding that monitoring "indicator" pollutants listed in this Order do not ensure compliance with water quality criteria or objectives for the pollutants expected to be represented by the "indicator" pollutants.

The filing of a request by the enrollee for modification, revocation and reissuance, or termination of this Order or an associated discharge authorization letter from the Executive Officer, or a notification of planned change in or anticipated noncompliance with this Order or discharge authorization letter does not stay any condition of this Order or the authorization letter from the Executive Officer.

5. Notwithstanding Provision D.4 above, if any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Board may institute proceedings under these regulations to modify or revoke and reissue this Order to conform to the toxic effluent standard or prohibition.
6. In addition to any other grounds specified herein, this Order or an authorization letter from the Executive Officer shall be modified or revoked at any time if, on the basis of any data, the Executive Officer determines that continued discharges may cause unreasonable degradation of the aquatic environment.

The Executive Officer of the Regional Board or the Director of the USEPA may require any person requesting authorization to discharge under this general permit or authorized to discharge under this general permit to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include but are not limited to those described in 40 CFR 122.28 (b)(3)(i) and (b)(3)(ii), and where the volume of a discharge exceeds 10 million gallons per year or the duration of a discharge exceeds 3 years.

7. An authorized discharge, either separately or jointly with any other discharge, shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act or amendments thereto, the Regional Board will revise and modify this Order in accordance with the more stringent standards.
8. The enrollee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement.
9. This Order or an authorization letter from the Executive Officer, is not transferable to any person except after notice to the Executive Officer of this Regional Board. The Regional Board may require the transmittal of a new discharge authorization letter from the Executive Officer to change the name of the enrollee and incorporate such other requirements as may be necessary under the California Water Code and the Clean Water Act. The enrollee shall submit notice of any transfer of this Order's responsibility and coverage to a new enrollee as described under Reporting Requirement E.3.
10. This Order or an authorization letter from the Executive Officer, does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed

herein do not authorize the commission of any act causing injury to persons or property of another, including property damage caused as a result of the migration of groundwater contaminant plumes, nor protect the enrollee from liabilities under federal, state, or local laws, nor create a vested right for the enrollee to continue the waste discharge.

11. The enrollee shall allow the Regional Board, or an authorized representative or any representative of the United States Environmental Protection Agency upon the presentation of credentials and other documents as may be required by law, to:
  - a. Enter upon the enrollee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
  - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operation regulated or require under this Order; and
  - d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the Clean Water Act or California Water Code, any substances or parameters at any location.
12. The enrollee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the enrollee to achieve compliance with the conditions of this Order or an authorization letter from the Executive Officer. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this Order or an authorization letter from the Executive Officer.
13. Bypass of Treatment Facilities
  - a. Definitions
    - (1) "Bypass" means the intentional diversion of waste streams from any portion of the treatment facility.
    - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which cause them to become

inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass Not Exceeding Effluent Limitations

The enrollee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operations. These bypasses are not subject to the provisions of paragraphs (c) and (d) of this section.

c. Notice of Anticipated Bypass and Unanticipated Bypass

- (1) Anticipated bypass. If the enrollee knows in advance of the need for a bypass, they shall submit prior notice, if possible, at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The enrollee shall submit notice of an unanticipated bypass as described under Reporting Requirement E.5.

d. Prohibition of Bypass

- (1) Bypass is prohibited and the Regional Board may take enforcement action against the enrollee for bypass, unless:
  - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the enrollee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (c) The enrollee submitted notices as required under paragraph (c) of this section.
- (2) The Regional Board may approve an anticipated bypass, after considering its adverse effect, if the Regional Board determines that it will meet the three conditions listed above in paragraph (a) of this section.

#### 14. Upset Conditions

##### a. Definitions

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the enrollee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

##### b. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of paragraph (c) of this section are met. No determination made during administrative review of claims that noncompliance, was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

##### c. Conditions Necessary for a Demonstration of Upset

A enrollee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operations logs, or other relevant evidence that:

- (1) An upset occurred and that the enrollee can identify the specific cause(s) of the upset;
- (2) The permitted facility was at the time being properly operated; and
- (3) The enrollee submitted notice of the upset as required in Reporting Requirement E.6.

##### d. Burden of Proof

In any enforcement proceeding the enrollee seeking to establish the occurrence of an upset has the burden of proof.

15. In an enforcement action, it shall not be a defense for the enrollee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order or an authorization letter from the Executive

Officer. Upon reduction, loss, or failure of the treatment facility, the enrollee shall, to the extent necessary to maintain compliance with this Order or an authorization letter from the Executive Officer, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of the treatment facility fails, is reduced or is lost.

16. It shall not be a defense for the enrollee in an enforcement action that effluent limitation violations are a result of analytical variability rendering the results inaccurate. The validity of the testing results, whether or not the enrollee has monitored or sampled more frequently than required by this Order, shall not be a defense to an enforcement action.
17. A copy of this Order, and the authorization letter from the Executive Officer shall be posted at a prominent location at or near the enrollee's facility, and shall be available to operating personnel at all times.
18. The provisions of this Order and the authorization letter from the Executive Officer are severable, and if any provision of this Order or an authorization letter from the Executive Officer, or the application of any provision of this Order or an authorization letter to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Order and the authorization letter, shall not be affected thereby.
19. The enrollee shall take all reasonable steps to minimize or prevent any discharge in violation of this Order which has a reasonable likelihood of adversely affecting human health or the environment.
20. The enrollee shall comply with any interim effluent limitations as established by addendum, enforcement action or revised waste discharge requirements which have been or may be adopted by this Regional Board.

Pursuant to the CWC Section 13267(b) and 13383, the enrollee shall comply with *Monitoring and Reporting Program No. 2000-90* as specified by this Regional Board. The enrollee shall comply with all items of the "Standard Provisions" that are part of this Order (Attachment C).

21. The 6-month median effluent concentration limit shall apply as a moving median of daily values for any 180-day period in which daily values represent flow-weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.
22. The 30-day average shall be the arithmetic mean, using the results of analyses of all

samples collected during any 30 consecutive calendar day period.

23. The 7-day average shall be the moving arithmetic mean of daily concentrations over the specified 7-day period.
24. The daily maximum effluent concentration limitation shall apply to flow weighted 24 hour composite samples, or grab samples in the duration of the discharge is less than 24 hours.
25. The instantaneous maximum effluent concentration limit shall apply to grab sample determinations.
26. If only one sample is collected during the time period associated with the effluent limitations (e.g., 30-day average or 6-month median), the single measurement shall be used to determine compliance with the effluent limitation for the entire time period.
27. All analytical data shall be reported uncensored with detection limits and quantitation limits identified. For any effluent limitation, compliance shall be determined using appropriate statistical methods to evaluate multiple samples. Sufficient sampling and analysis shall be conducted to determine compliance.
28. Compliance based on a single sample analysis should be determined where appropriate as described below.
  - a. When a calculated effluent limitation is greater than or equal to the PQL (defined below), compliance shall be determined based on the calculated effluent limitation and either single or multiple sample analyses.
  - b. When the calculated effluent limitation is below the PQL, compliance determinations based on analysis of a single sample shall only be undertaken if the concentration of the constituent of concern in the sample is greater than or equal to the PQL.
  - c. When the calculated effluent limitation is below the PQL and recurrent analytical responses between the PQL and the calculated limit occur, compliance shall be determined by statistical analysis of multiple samples.
29. Published values for MDLs (defined below) and PQLs should be used except where revised MDLs and PQLs are available from recent laboratory performance evaluations, in which case the revised MDLs and PQLs should be used. Where published values are not available, the Regional Board will determine appropriate values based on available information, including information submitted by the enrollee upon request of the Regional Board.

- a. The Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero, as defined in 40 CFR Part 136 Appendix B.
  - b. The Practical Quantitation Level (PQL) is the lowest concentration of a substance which can be consistently determined within +/-20% of the true concentration by 75% of the labs tested in a performance evaluation study. Alternatively, if performance data are not available, the PQL for carcinogens is the MDL x 5, and for noncarcinogens is the MDL x 10.
30. When determining compliance based on a single sample, with a single effluent limitation which applies to a group of chemicals (e.g. PCBs) concentrations of individual members of the group may be considered to be zero if the analytical response for individual chemicals falls below the MDL for that parameter.
31. The mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

$$\text{mass emission rate (lb/day)} = 8.34 \times Q \times C$$

in which Q and C are the flow rate in MGD and the constituent concentration in mg/L, respectively, and 8.34 is a conversion factor. If a composite sample is taken, then C is the constituent concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited. Mass loading effluent limitations for a specific pollutant may be calculated using the authorized flowrate (in MGD) as the flow rate "Q" and the pollutant concentration limitation contained in Discharge Specification No. B.1 as the constituent concentration "C" in the above equation.

32. Compliance with the Acute Toxicity limitation in Discharge Specification B.1.a. of this Order shall be determined using an established protocol, e.g., American Society for Testing Materials (ASTM), USEPA, American Public Health Association, or State Board. Acute Toxicity (TUa) shall be expressed in Toxic Units Acute (TUa), where:

$$\text{TUa} = \frac{100}{96\text{-hour LC 50}}$$

Where LC50 is the Lethal Concentration 50% and the percent waste giving 50% survival of test organisms. LC50 shall be determined by static or continuous flow bioassay techniques using standard test species. If specific identifiable substances in wastewater can be demonstrated by the enrollee as being rapidly rendered harmless upon discharge to the marine environment, but not as a result of dilution, the LC 50



may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hour LC 50 due to greater than 50% survival of the test species in 100% waste, the toxicity concentration shall be calculated by the following:

$$TUa = \frac{\log(100 - S)}{1.7}$$

where S is the percentage survival in 100% waste. If  $S > 99$ , TUa shall be reported as zero.

33. Compliance with the Chronic Toxicity effluent limitation established in Discharge Specification No. B.1.b of this Order shall be determined using critical life stage toxicity tests. Chronic Toxicity (TUc) shall be expressed as Toxic Units Chronic (TUc), where:

$$TUc = \frac{100}{NOEL}$$

where NOEL is the No Observed Effect Level and is expressed as the maximum percent of effluent that causes no observable effect on a test organism, as determined by the result of a critical life stage toxicity test listed below.

A minimum of three test species with approved test protocols shall be used to measure compliance with the chronic toxicity objective. The test species shall include a fish, an invertebrate, and an aquatic plant. Acceptable test species are: Fish=stickleback, Invertebrate=mussel or abalone; Plant=kelp. After a screening period, monitoring may be reduced to the most sensitive species. Dilution and control water should be obtained from an unaffected area of the receiving waters. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay test and reported with the test results.

The tests specified in the March 1997 Ocean Plan shall be used to measure TUc. Other tests may be added to the list when approved by the SWRCB.

34. No later than six months after authorization to discharge under this Order, all permanent groundwater extraction enrollees enrolled under this general permit shall develop a Toxicity Reduction Evaluation (TRE) workplan in accordance with USEPA's Toxicity Reduction Evaluation Procedures: Phases 1, 2, and 3, (USEPA document Nos. USEPA 600/3-88/034, 600/3-88/035 and 600/3-88/036, respectively), and TRE Protocol for Municipal Wastewater Treatment Plants (USEPA 600/2-88/062). The TRE workplan shall be subject to the approval of the Regional Board and shall be modified as directed

by the Regional Board. All enrollees shall submit the TRE workplan to the Regional Board upon completion of the TRE workplan. Submittal of the TRE workplan on a IBM formatted double sided high density 3.5" floppy disk in Word version 7.0 format is acceptable.

If toxicity testing results show a violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1 of this Order, the enrollee shall:

- a. Take all reasonable measures necessary to immediately minimize toxicity; and
- b. Increase the frequency of the toxicity test(s) which showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.

If the Regional Board determines that toxicity testing shows consistent violation of any acute or chronic toxicity limitation identified in Discharge Specification B.1. of this Order, the enrollee shall conduct a TRE which includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the enrollee shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specification B.1 of this Order.

Within fourteen days of completion of the TRE, the enrollee shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this Order and prevent recurrence of violations of those limitations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Regional Board.

35. For all bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000 MPN (most probable number). The detection methods used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those presented in the most recent edition of Standard Methods for the Examination of Water and Wastewater or any improved method determined by the Regional Board (and approved by USEPA) to be appropriate. Detection methods used for enterococcus shall be those presented in USEPA publication USEPA 600/4-85/076, Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure or any improved method determined by the Regional Board to be appropriate.
36. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

$$\text{Geometric Mean} = (C_1 \times C_2 \times \dots \times C_n)^{1/n}$$

where n is the number of days samples were collected during the period and C is the concentration of bacteria (MPN/100 mL) found on each day of sampling.

37. As used in this Order, waste includes an enrollee's total discharge, of whatever origin, i.e. gross, not net, discharge.
38. Reduction of natural light may be determined by the Regional Board by measurement of light transmissivity or total irradiance, or both, according to the monitoring needs of the Regional Board.
39. The following sections of 40 CFR are incorporated into this permit by reference:
  - a. 122.5 *Effect of a permit*
  - b. 122.21 *Application for a permit*
  - c. 122.22 *Signatories to permit applications and reports*
  - d. 122.41 *Conditions applicable to all permits*
  - e. 122.61 *Transfer of permits*
  - f. 122.62 *Modification or revocation of permits*
  - g. 122.63 *Minor modifications of permits*
  - h. 122.64 *Termination of permits*

## **E. REPORTING REQUIREMENTS**

1. The enrollee shall file a new application and certification report not less than 180 days prior to the following:
  - a. Addition of any waste or chemical constituent to the discharge or the addition of a new process or product resulting in a change in the character of the wastes.
  - b. Significant change in disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste).
  - c. Significant change in the location of the point of discharge and in disposal area (e.g., moving the discharge to a disposal area significantly removed from the original area, potentially causing different water quality or nuisance problems).
  - d. Increase in flow beyond that specified in the enrollee's authorization letter from the Executive Officer.

- e. Other circumstances which result in a material change in character, amount, or location of the waste discharge.
  - f. Any planned physical alterations or additions to the permitted discharge/facility.
- 2. The enrollee shall give advance notice to the Regional Board of any planned changes in the permitted facility or activity which may result in noncompliance with the requirements of this Order or an authorization letter from the Executive Officer.
- 3. The enrollee must notify the Regional Board, in writing, at least 30 days in advance of any proposed transfer of authorization and responsibility for compliance with this Order to a new enrollee. The notice must include a written agreement between the existing and new enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the current enrollee and the new enrollee. This agreement shall include an acknowledgement that the existing enrollee is liable for violations up to the transfer date and that the new enrollee is liable from the transfer date on.
- 4. The enrollee shall comply with the attached Monitoring and Reporting Program No. 2000-90 and any additional monitoring requirements specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2000-90. The sampling and analysis schedule in the attached monitoring program is the program to be followed. If requested by the enrollee, the monitoring program may be modified or reduced by the Executive Officer after review of results from not less than four sampling events with a sampling frequency of not less than monthly. If the groundwater extraction and/or treatment system(s) described in the application and certification report is modified, the schedule of applicable monitoring specified in Monitoring and Reporting Program No. 2000-90 will be reviewed for possible modification.
- 5. The enrollee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally to the Regional Board within 24 hours from the time the enrollee becomes aware of the circumstances. The enrollee shall submit a written report containing a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The written report shall be included with the monitoring report for the period in which the noncompliance occurred, or earlier if requested by the Regional Board. The following occurrence(s) must be reported to the Regional Board within 24 hours:
  - a. Any upset which causes the effluent limitations of this Order to be exceeded.

- b. Any unanticipated bypass which causes the effluent limits of this Order to be exceeded.
  - c. Violations of a daily maximum effluent limitation as specified in this Order for the following pollutants:
    - (1) Hydrogen Sulfide
    - (2) Total Chlorine Residual<sup>11</sup>
    - (3) Benzene
    - (4) Ethylbenzene
    - (5) Toluene
    - (6) Xylene
    - (7) Total Petroleum Hydrocarbons
    - (8) Methyl Tertiary Butyl Ether (MTBE)
    - (9) Arsenic
    - (10) Cadmium
    - (11) Chromium (Hexavalent)<sup>13</sup>
    - (12) Copper
    - (13) Lead
    - (14) Mercury
    - (15) Nickel
    - (16) Silver
    - (17) Zinc
    - (18) Cyanide
    - (19) Phenolic Compounds (nonchlorinated)
    - (20) Chlorinated Phenolics
    - (21) Polychlorinated Biphenyls
    - (22) Remaining Volatile and Base/Neutral Compounds<sup>14</sup>
    - (23) Chronic Toxicity Concentration
  - d. Any violation of any of the prohibitions of this Order or an authorization letter from the Executive Officer.
6. The enrollee shall notify the Regional Board as soon as it is known or there is reason to believe:
- a. That any activity has occurred or which will occur which would result in the discharge of any toxic pollutant which is not limited in this Order, if that discharge will exceed the highest of the following "notification levels":
    - 1. One hundred micrograms per liter (100 µg/L);

2. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
7. The enrollee shall furnish to the Regional Board, within a reasonable time, any information which the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or an authorization letter, or to determine compliance with this Order or other requirements established by the Regional Board. The enrollee shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order or an authorization letter from the Executive Officer.
8. The enrollee shall provide adequate notice to the Regional Board of the following:
  - a. Any new introduction of pollutants to the discharge.
  - b. Any substantial change in the volume or character of pollutants being introduced into the discharge.
  - c. For the purpose of this provision, adequate notice shall include information on (1) the quality and quantity of waste introduced into the discharge, (2) relocation of the point of discharge or change in the storm drain or conveyance system used to discharge to San Diego Bay, and (3) any anticipated impact of the change on the quantity or quality of effluent to be discharged to San Diego Bay.
9. Where the enrollee becomes aware that it failed to submit any relevant facts in an application or certification report, or submitted incorrect information in an application or certification report, or in any report to the Regional Board, it shall promptly submit such facts or information.
10. If a need for a discharge bypass is known in advance, the enrollee shall submit prior notice and, if at all possible, such notice shall be submitted at least ten days prior to the date of the bypass.
11. This Order expires on June 14, 2005. However, it will continue in force and effect until a new general permit is issued or the Regional Board rescinds this general permit.
12. All applications, reports, or information submitted to the Executive Officer of this Regional Board shall be signed and certified.
  - a. The application and certification report shall be signed as follows:

1. For a corporation - by a principal executive officer of at least the level of vice-president.
  2. For a partnership or sole proprietorship - by a general or partner or the proprietor, respectively.
  3. For a municipality, state, federal or other public agency - by either a principal executive officer or ranking elected official.
- b. All other reports required by this Order and other information requested by the Regional Board shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
1. The authorization is made in writing by a person described in paragraph (a) of this provision;
  2. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and
  3. The written authorization is submitted to the Executive Officer.
- c. Any person signing a document under this Section shall make the following certification:
- "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
13. Except for data determined to be confidential under Title 40, Code of Federal Regulations Part 2(40 CFR Part 2), all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the California Regional Water Quality Control Board, San Diego Region and the United States Environmental Protection Agency Region 9. As required by the Clean Water Act, Reports of Waste Discharge, this Order, and effluent data shall not be considered

confidential.

14. In order to obtain authorization to discharge under the terms and conditions of this Order, the enrollee shall submit an application on forms provided by the Regional Board, and in accordance with directions specified by the Regional Board. **The application shall include the following information and materials:**
- a. **Project type: remediation or construction.**
  - b. **Project address/location (include a map).**
  - c. **Number of groundwater extraction sites.**
  - d. **Estimated maximum discharge flowrate(s) (GPD).**
  - e. **Estimated duration of groundwater extraction operation.**
  - f. **Proposed groundwater extraction start date.**
  - g. **Proposed location(s) of discharge points.**
  - h. **Location and description of storm drain(s) or conveyance system(s) used to route discharge to San Diego Bay.**
  - i. **Name of public agency or entity having jurisdiction of storm drain(s) or conveyance system(s) used to discharge to San Diego Bay.**
  - j. **Proof of notification to the public agency or entity responsible for the storm drain(s) or conveyance system(s) used to route the proposed discharge to San Diego Bay.**
  - k. **Cone of influence assessment.**
  - l. **Historical land use report.**
  - m. **Proximity of discharge location to Areas of Special Biological Significance (ASBS).**
  - n. **Site Assessment (if a site assessment has been done).**
  - o. **Description of all known contamination within the cone of influence.**
  - p. **Proposed treatment processes, including chemicals to be used for biofouling control.**
  - q. **BMP and contingency plan (for leaks, spills and treatment system failures).**
  - r. **Discussion of the potential uses of the extracted groundwater and compliance with Article X, Section 2, of the California Constitution. An example of a potential use is dust control.**
  - s. **Discussion of the potential for disposal to alternative receiving waters. Examples of alternative methods of disposal are reinjection and percolation into the ground.**
  - t. **Statement of compliance with 40CFR 131.12 and SWRCB Resolution No. 68-16 (collectively Antidegradation Policies).**
  - u. **Results of analyses of the groundwater to be extracted for all of the constituents listed in Discharge Specification B.1. of this Order.**
  - v. **Signed Certification of Compliance statement on responsible party letterhead.**



Enrollees applying for enrollment under this Order shall notify the Agency/Municipality that owns, operates, and maintains the storm drain conveyance system that the enrollee proposes to use as a discharge conveyance system to a surface water.

15. The enrollee shall submit written notification of the termination of the discharge to the Regional Board within 30 days of termination of the discharge.
16. The enrollee shall submit reports required under this Order to:

Surface Water Unit  
California Regional Water Quality Control Board  
San Diego Region  
9771 Clairemont Mesa Blvd, Suite A  
San Diego, California 92124-1324

Notifications required to be provided to this Regional Board shall be made to:

Telephone - (858) 467-2952 or  
Facsimile - (858) 571-6972

#### **F. NOTIFICATIONS**

1. California Water Code Section 13263(g) states:

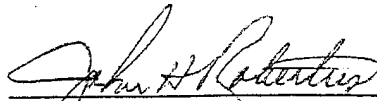
"No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights."

2. The Clean Water Act provides that any person who violates a condition of this Order implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$10,000 per day of such violations. Any person who willfully or negligently violates conditions of this Order implementing Section 301, 302, 306, 307 or 308 of the Clean Water Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both.
3. The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this Order, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per

violation, or by both.

4. Nothing in this Order shall be construed to relieve the enrollee from civil or criminal penalties for noncompliance.
5. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the enrollee from any responsibilities, liabilities, or penalties to which the enrollee is or maybe subject to under Section 311 of the Clean Water Act.
6. Nothing in this Order shall be construed to preclude institution of any legal action or relieve the enrollee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.
7. If the Water Quality Control Policy for Enclosed Bays and Estuaries of California is revised, this Order may be modified to incorporate such revisions. If a Water Quality Control Plan for Enclosed Bays and Estuaries of California is adopted, this Order may be modified to implement such a plan.
8. This Order does not apply to discharges regulated by a municipal stormwater permit.
9. This Order shall become effective 10 days after the date of its adoption, provided the Regional Administrator or Director, United States Environmental Protection Agency, has no objection. If the Regional Administrator or Director objects to its issuance, this Order shall not become effective until such objection is withdrawn.
10. At each regularly scheduled Regional Board meeting, the Executive Officer will include a report of the applications for authorization to discharge under this Order, and of the authorizations to discharge issued, and modifications to existing authorizations.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on June 14, 2000.

  
\_\_\_\_\_  
John H. Robertus  
Executive Officer

**ENDNOTES**  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

**Endnote references for waste discharge requirements for Order No. 2000-90 NPDES Permit No. CAG919001),** General Waste Discharge Requirements for Temporary Groundwater Extraction and Similar Waste Discharges to San Diego Bay and Storm Drains or Other Conveyance Systems Tributaries Thereto, San Diego County.

1. For the purposes of this Order, "permanent groundwater extraction operations" are groundwater dewatering operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s).

For purposes of this Order, "new permanent groundwater extraction operations" are permanent groundwater dewatering operations which were initiated after April 23, 1990 where the enrollee was not issued an individual NPDES permit for a proposed discharge of groundwater extraction waste from a permanent dewatering operation to San Diego Bay prior to adoption of Order No. 90-31, unless, prior to adoption of Order No. 90-31, the enrollee applied for and obtained all necessary building permits from the proper agencies.

Groundwater extraction waste discharges to San Diego Bay which are not from new permanent groundwater extraction operations, such as groundwater cleanup and construction dewatering discharges, may be authorized under the terms and conditions of this Order. Discharges of groundwater for the purpose of protecting subterranean structures from groundwater infiltration are not considered groundwater cleanup projects, whether or not such discharges cleanup or remove pollutants from the groundwaters.

This prohibition does not apply to existing or new small dewatering sumps necessary to protect public utilities (e.g., electrical, telephone, municipal sewer pumping stations, and other utilities vital to the public) and which have intermittent discharges.

2. "Best available technology economically achievable" refers to the best treatment technologies available which have been determined to be cost effective, reliable, and efficient by the United States Environmental Protection Agency (USEPA) or State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB).
3. 40 CFR 122.44(d)(1)(vii) requires that if indicator monitoring parameters are used, the following four provisions must be fulfilled: 1) the permit identifies which pollutants are intended to be controlled by use of the indicator effluent limitations, 2) the fact sheet sets forth the basis for each indicator chemical's effluent concentration limitation and includes a finding that compliance with the limit on the indicator constituent will result in controls on the pollutant(s) of

concern which are sufficient to attain and maintain water quality standards, 3) effluent and receiving water quality monitoring to show the limit on the indicator parameter attains and maintains applicable water quality standards, and 4) the permit contains a reopener clause. Each of the preceding conditions for inclusion of indicator parameter monitoring has been addressed in this Order, the attached Monitoring and Reporting Program, the discharge authorization letter from the Executive Officer, or the Fact Sheet for this Order.

4. Leaking Underground Fuel Tank Manual (LUFT): Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, State of California, Leaking Underground Fuel Tank Task Force, established May 1988.
5. Diesel fuel consists primarily of straight-chain hydrocarbons (alkenes and alkanes) ranging in length from C10 to C23 with C16 and C17 predominating. The C10-C30 straight-chain hydrocarbons can be quantified in groundwater using standard analytical techniques (e.g. California Department of Health Services' recommended analytical procedure for total petroleum hydrocarbons - diesel, (LUFT Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, October 1989), base/neutral organic analytical techniques contained in 40 CFR 136). Since the predominant components of diesel fuel are the straight-chain hydrocarbons, the total petroleum hydrocarbon - diesel standard testing method contained in the LUFT Manual is used as the indicator of diesel fuel-contaminated groundwaters. Groundwater gasoline remediation projects may use standard TPH methods.
6. NPDES Permit Limitations for Discharge of Contaminated Groundwater: Guidance Document (Draft), U.S. Environmental Protection Agency, Water Management Division, July 1986.
7. After receipt of an application and certification report as required by Reporting Requirement E.14 of Order No. 2000-90, the Executive Officer may 1) determine that the proposed discharge is subject to regulation by Order No. 2000-90, 2) determine that the proposed discharge is not subject to regulation by Order No. 2000-90, or 3) request additional information in order to determine if the discharge is subject to regulation by Order No. 2000-90. If the Executive Officer determines that the proposed discharge is subject to regulation by Order No. 2000-90, an "authorization letter" will be issued to the enrollee authorizing the discharge subject to the terms and conditions of Order No. 2000-90 and any other conditions necessary to protect the beneficial uses of San Diego Bay. The authorization letter from the Executive Officer will also specify the maximum allowed discharge flowrate (which also limits the mass loading rate for each pollutant listed in Discharge Specification No. B.1. of Order No. 2000-90) and any additional monitoring and reporting requirements not covered by Monitoring and Reporting Program No. 2000-90. Discharge authorization letters issued by the Executive Officer for discharges from groundwater remediation operations, shall specify effluent limits and monitoring requirements for the constituents necessitating remediation. If the Executive Officer does not issue written authorization for a discharge under the terms and conditions of Order No. 2000-90, the discharge of groundwater extraction waste to San Diego Bay is

prohibited.

8. The effluent limitations for Ocean Plan Table B constituents for groundwater extraction waste discharges were determined by using an initial dilution factor of zero and applying the calculations and procedures found in the Water Quality Control Plan, Ocean Waters of California, 1997. The effluent limitations for volatile organics (e.g., benzene, ethylbenzene, toluene, and xylene, etc.) are based on best professional judgement of the best available technology economically achievable (BAT) for the removal of volatile organic compounds from water (reference is made to NPDES Permit Limitations for Discharge of Contaminated Groundwater: Guidance Document (Draft), U.S. Environmental Protection Agency, Water Management Division, July 1986) and the practical quantitation level for each compound. Effluent limitations for settleable solids, total suspended solids, toxicity, hydrogen sulfide, and total petroleum hydrocarbons are based on best professional judgement.

Where effluent concentration limitations in this Order are less than Method Detection Limits (MDL) contained in 40 CFR 136, or other analytical detection levels approved by the Regional Board, compliance with effluent limitations will be assumed if the effluent concentration is less than the MDL or practical quantitation levels contained in the approved analytical methods unless more definitive (sensitive) analytical methods are requested by the Regional Board. If sample matrix interferences, or other interferences, result in analytical detection levels less sensitive than those listed in 40 CFR 136, or other methods approved by the Regional Board, such interferences shall be documented by the laboratory performing the analyses.

9. The "Basis" for each numerical effluent pollutant concentration limit necessary to protect the beneficial uses of San Diego Bay waters was derived or obtained as indicated in the Discharge Specification B.1. table. Abbreviations listed in the table are explained in the Endnote reference nos. 11, 12, and 14 below.

On April 28 2000, the USEPA promulgated the California Toxics Rule (CTR), numeric water quality criteria for priority toxic pollutants and other water quality standards provisions to be applied to waters in the State of California. USEPA promulgated this rule based on the administrator's determination that the numeric criteria are necessary in the State of California to protect human health and the environment. USEPA promulgated this rule to fill a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, the State of California has been without numeric water quality criteria for many priority toxic pollutants as required by the Clean Water Act, necessitating this action by USEPA. These Federal criteria are legally applicable in the State of California for inland surface waters, enclosed bays and estuaries for all purposes and programs under the Clean Water Act.

10. "BPJ" = Best Professional Judgement. The application of best professional judgement in establishing effluent limitations is authorized by 40 CFR125.3. The establishment of BPJ

effluent limitations is based on 1) review of effluent limitations for similar operations which discharge wastes to enclosed bays or other receiving waters in the State of California, 2) Compliance with general narrative water quality objectives as required in the Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan), 3) Review of technical support documents Quality Criteria for Water, United States Environmental Protection Agency, if available, for suggested criteria for the protection of aquatic life, 4) Water Quality Control Plan, Ocean Waters of California, 1997, and, 5) Water Quality Control Policy for Enclosed Bays and Estuaries of California.

11. Total Residual Chlorine: In samples obtained from marine, saline, or other waters containing bromine, total residual chlorine limitations shall apply to total residual oxidants (TRO). The effluent and receiving water quality limitations for chlorine are based on a continuous discharge. Effluent and receiving water quality limitations for total chlorine residual applying to intermittent chlorine discharges not exceeding two hours, shall be determined through the use of the following equation:

$$\log y = -0.33(\log x) + 2.1$$

where y =	the effluent and receiving water quality limitation (in $\mu\text{g/L}$ ) to apply when chlorine is being discharged;
x =	the duration of uninterrupted chlorine discharge in minutes.

12. "BPJ/BAT"= The best professional judgement of the best available technology economically achievable. The effluent limitations for volatile and semivolatile organic compounds are based on BPJ/BAT for the removal of organic constituents as authorized by Section 301 (b)(2) of the Clean Water Act. The establishment of the BPJ/BAT effluent limitations is based on 1) economically achievable pollutant removal efficiencies of available treatment technologies, 2) method detection limits (MDL) or practical quantitation levels (PQL) established for organic contaminants in waters, 3) the draft document NPDES Permit Limitations for Discharge of Contaminated Groundwater: Guidance Document for volatile petroleum hydrocarbons, prepared by Harold A. Ball and Kenneth H. Sutherland, United States Environmental Protection Agency, Water Management Division, July 1986, 4) Leaking Underground Storage Tank Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, State of California, Leaking Underground Fuel Tank Task Force, May 1988, 5) Final NPDES General Permit for Petroleum Fuel Contaminated Ground/Storm Waters in the State of Florida, Federal Register, July 17, 1989, and, 6) Model NPDES Permit for Discharges Resulting From the Cleanup of Gasoline Released From Underground Storage Tanks, U.S. Environmental Protection Agency, June 1989.

13. The hexavalent chromium limit may be met as a total chromium limit. If analytical results for total chromium reveal a total chromium concentration greater than the effluent limitations for

hexavalent chromium and the sample has not been analyzed for hexavalent chromium, it will be assumed that hexavalent chromium concentrations are in violation of the effluent limitation.

14. "Base/neutral organic compounds" are listed in 40CFR 136. The instantaneous maximum effluent limitation of 10 ug/L for base/neutral compounds does not apply to pesticides.
15. Degradation shall be determined by comparison of the waste field and reference site(s) for characteristics such as species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected or are not the only ones affected.
16. Significant difference is defined as statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.
17. Compliance with the water quality objectives shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed. Since the effluent limitations in this Order are based on an initial dilution factor of zero, compliance with the water quality objectives shall be achieved at all locations in the receiving water.
18. Shellfish are organisms identified by the California Department of Health Services as shellfish for public health purposes (i.e. mussels, clams and oysters).

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

**MONITORING AND REPORTING PROGRAM NO. 2000-90**  
FOR  
GENERAL WASTE DISCHARGE REQUIREMENTS  
FOR  
TEMPORARY GROUNDWATER EXTRACTION AND SIMILAR WASTE DISCHARGES  
TO  
SAN DIEGO BAY AND STORM DRAINS OR OTHER CONVEYANCE SYSTEMS TRIBUTARIES  
THERETO  
SAN DIEGO COUNTY

**A. PURPOSE**

This monitoring program is intended to:

- Document short-term and long-term effects of the discharge on receiving waters, sediments, biota, and beneficial uses of the receiving water.
- Determine compliance with NPDES permit terms and conditions.

The monitoring data will be used to determine compliance with water quality objectives.

**B. MONITORING PROVISIONS**

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in the Order and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to any the approval of the Regional Board.
2. Monitoring must be conducted according to United States Environmental Protection Agency test procedures approved under Title 40, Code of Federal Regulations (CFR, Part 136, "Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act" as amended, unless other test procedures have been specified by this Order).
3. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Board.



4. Monitoring results must be reported on discharge monitoring report forms approved by the Regional Board.
5. If the enrollee monitors any pollutant more frequently than required by this Order, using test procedures approved under 40 CFR, Part 136, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the enrollee's monitoring report. The increased frequency of monitoring shall also be reported.
6. The enrollee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board Executive Officer.
7. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed analyses;
  - e. The analytical techniques or method used; and
  - f. The results of such analyses.
8. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Regional Board or in this Order.
9. All monitoring instruments and devices used by the enrollee to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
10. The enrollee shall report all instances of noncompliance including those reported under Reporting Requirement No. E.5 of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement No. E.5.

11. The monitoring reports shall be signed by an authorized person as required by Reporting Requirements No. E.12.
12. A composite sample is defined as a combination of at least 8 sample aliquots of at least 100 milliliters each, collected at periodic intervals during the operating hours of a facility over a 24-hr period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
13. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
14. For every item where the requirements are not met, the enrollee shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time and submit a timetable for correction.

### C. TREATMENT SYSTEM STATUS

The daily status (e.g., onsite, in operation/on standby, etc.) of any treatment systems used to achieve compliance with Order No. 2000-90 or an associated discharge authorization letter from the Executive Officer shall be reported monthly.

### D. DISCHARGE MONITORING for temporary long term discharges (discharges with a duration of greater than 6 months)

Discharge monitoring shall be conducted as follows:

Constituent	Units <sup>1</sup>	Sample Type	Minimum Frequency Of Analysis	Reporting Frequency
Flowrate	gpd	NA	Daily	Monthly
Settleable Solids	mg/L lb/d	grab	Monthly	Monthly
Total Suspended Solids	mg/L lb/d	"	"	"
Hydrogen Sulfide	mg/L lb/d	"	"	"
Total Residual Chlorine <sup>2</sup>	µg/L lb/d	"	Daily when chlorinating	"
pH	Units	"	Monthly	"

Constituent	Units <sup>1</sup>	Sample Type	Minimum Frequency Of Analysis	Reporting Frequency
Benzene	μg/L	"	"	"
	lb/d	"	"	"
Ethylbenzene	μg/L	"	"	"
	lb/d	"	"	"
Toluene	μg/L	"	"	"
	lb/d	"	"	"
Xylene	μg/L	"	"	"
	lb/d	"	"	"
Total Petroleum Hydrocarbons <sup>4</sup> (TPH)	mg/L	"	quarterly	quarterly
	lb/d	"	"	"
Methyl Tertiary Butyl Ether (MTBE)	ug/L	"	"	"
Tributyltin (TBT)	μg/L	"	"	"
	lb/d	"	"	"
Arsenic	μg/L	"	"	"
	lb/d	"	"	"
Cadmium	μg/L	"	"	"
	lb/d	"	"	"
Chromium <sup>5</sup>	μg/L	"	"	"
	lb/d	"	"	"
Copper	μg/L	"	"	"
	lb/d	"	"	"
Lead	μg/L	"	"	"
	lb/d	"	"	"
Mercury	μg/L	"	"	"
	lb/d	"	"	"
Nickel	μg/L	"	"	"
	lb/d	"	"	"
Silver	μg/L	"	"	"
	lb/d	"	"	"
Zinc	μg/L	"	"	"
	lb/d	"	"	"
Cyanide	μg/L	"	"	"
	lb/d	"	"	"
Phenolic Compounds (nonchlorinated)	μg/L	"	Semiannually	Semiannually
	lb/d	"	"	"
Chlorinated Phenolics	μg/L	"	"	"
	lb/d	"	"	"
Base/Neutrals <sup>3</sup>	ug/L	"	"	"
	lb/d	"	"	"
1,1,2,2-tetrachloroethane (PCA) <sup>7</sup>	ug/L	"	quarterly	quarterly
1,1,1-trichloroethane (TCA) <sup>7</sup>	mg/L	"	"	"
1,1,2-trichloroethane (TCA) <sup>7</sup>	ug/L	"	"	"
1,2-dichloroethane <sup>7</sup>	ug/L	"	"	"
Tetrachloroethylene (PCE) <sup>7</sup>	Ug/L	"	"	"

Constituent	Units <sup>1</sup>	Sample Type	Minimum Frequency Of Analysis	Reporting Frequency
Trichloroethylene (TCE) <sup>7</sup>	ug/L	"	"	"
vinyl chloride <sup>7</sup>	ug/L	"	"	"
Carbon tetrachloride <sup>7</sup>	ug/L	"	"	"
Acute Toxicity	TUa	"	"	"
Chronic Toxicity	Tuc	"	"	"

**E. DISCHARGE MONITORING for temporary short term discharges (discharges with a duration of 6 months or less at a particular groundwater extraction site)**

Discharge monitoring shall be conducted as follows:

Constituent	Units <sup>1</sup>	Sample Type	Minimum Frequency of Analysis	Reporting Frequency
Flowrate	gpd	NA	Daily	Monthly
Settleable Solids	mg/L	grab	Every other week	Monthly
	lb/d	"	"	"
Total Suspended Solids	mg/L	grab	"	"
	lb/d	"	"	"
Hydrogen Sulfide	mg/L	"	"	"
	lb/d	"	"	"
Total Residual Chlorine <sup>2</sup>	μg/L	"	Daily when chlorinating	"
	lb/d	"	"	"
PH	Units	"	Every other week	"
Benzene	μg/L	grab	every other week	monthly
	lb/d	"	"	"
Ethylbenzene	μg/L	"	"	"
	lb/d	"	"	"
Toluene	μg/L	"	"	"
	lb/d	"	"	"
Xylene	μg/L	"	"	"
	lb/d	"	"	"
Total Petroleum Hydrocarbons <sup>4</sup>	mg/L	"	"	"
	lb/d	"	"	"
Methyl Tertiary Butyl Ether (MTBE)	ug/L	"	"	"
Tributyltin (TBT)	μg/L	"	quarterly	quarterly
	lb/d	"	"	"
Arsenic	μg/L	"	Every other month	"
	lb/d	"	"	"
Cadmium	μg/L	"	"	"
	lb/d	"	"	"
Chromium <sup>5</sup>	μg/L	"	"	"
	lb/d	"	"	"
Copper	μg/L	"	"	"

Constituent	Units <sup>1</sup>	Sample Type	Minimum Frequency of Analysis	Reporting Frequency
	lb/d	"	"	"
Lead	μg/L	"	"	"
	lb/d	"	"	"
Mercury	μg/L	"	"	"
	lb/d	"	"	"
Nickel	μg/L	"	"	"
	lb/d	"	"	"
Silver	μg/L	"	"	"
	lb/d	"	"	"
Zinc	μg/L	"	"	"
	lb/d	"	"	"
Cyanide	μg/L	"	"	"
	lb/d	"	"	"
Phenolic Compounds (nonchlorinated)	μg/L	"	Quarterly	"
	lb/d	"	"	"
Chlorinated Phenolics	μg/L	"	"	"
	lb/d	"	"	"
Base/Neutrals <sup>3</sup>	ug/L	"	"	"
	lb/d	"	"	"
1,1,2,2-tetrachloroethane (PCA) <sup>7</sup>	ug/L	"	"	"
1,1,1-trichloroethane (TCA) <sup>7</sup>	mg/L	"	"	"
1,1,2-trichloroethane (TCA) <sup>7</sup>	ug/L	"	"	"
1,2-dichloroethane <sup>7</sup>	ug/L	"	"	"
Tetrachloroethylene (PCE) <sup>7</sup>	ug/L	"	"	"
Trichloroethylene (TCE) <sup>7</sup>	ug/L	"	"	"
Vinyl chloride <sup>7</sup>	ug/L	"	"	"
Carbon tetrachloride <sup>7</sup>	ug/L	"	"	"
Acute Toxicity	TUa	"	"	"
Chronic Toxicity <sup>6</sup>	TUc	"	"	"

**F. DISCHARGE MONITORING for Groundwater Extraction Operations associated with Sewer System Replacement Construction Projects (In addition to those Constituents in Monitoring Provision D. or E.)**

Constituent	Units <sup>1</sup>	Sample Type	Minimum Frequency of Analysis	Reporting Frequency
Total Coliform	MPN/100ml	Grab	Weekly	Monthly
Fecal Coliform	"	"	"	"
Dissolved Oxygen	mg/L	"	"	"

## **G. BIOMONITORING**

The presence of acute toxicity will be determined as specified in *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms* (EPA 600/4-90-027F, August, 1993 or subsequent editions). Within 12 months of the expiration date of the NPDES permit, the enrollee shall conduct a toxicity test on a 24-hour composite effluent sample. The enrollee shall submit the results of the Acute Toxicity Test as part of the application for permit renewal. Samples shall be taken at a representative sampling location. The enrollee shall conduct a 96-hour static-renewal test with the Three Spine Stickleback (*Gasterosteus aculeatus*). The effluent concentrations will be 100%, 75%, 50%, 25%, and 12.5% and a control. The effluent test must be conducted with concurrent reference toxicant tests. Both the reference toxicant and the effluent test must meet all test acceptability criteria as specified in the acute manual. If the test acceptability criteria are not achieved, then the permittee must re-sample and re-test within 14 days. If acceptable test results are not achieved on the re-test, a toxicity reduction evaluation (TRE) must be implemented.

Acute toxicity test results will be expressed as  $TU_a$ , which equals  $100/NOAEC$ . No Observable Adverse Effect Concentration (NOAEC) is the highest concentration at which survival is not significantly different from the control in a 96-hour renewal test.

## **H. TOXICITY REDUCTION EVALUATION (TRE)**

The enrollee shall develop a Toxicity Reduction Evaluation (TRE) workplan. The workplan shall be subject to the approval of the Executive Officer and shall be modified as directed by the Executive Officer. Enrollees shall submit the TRE workplan to the Executive Officer upon request of the Executive Officer. The TRE workplan shall be developed no later than six months after adoption of this Order in accordance with the following manuals:

- a) Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070).
- b) Toxicity Identification Evaluation, Phase I (EPA/600/6-91/005F).
- c) Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R-92/080).
- d) Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R-92/081).

If toxicity-testing results show a violation of any acute toxicity limitation identified in Discharge Specification B.2 of this Order, the enrollee shall:

- a) Take all reasonable measures necessary to immediately minimize toxicity; and
- b) Increase the frequency of the toxicity test(s) that showed a violation to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.

If the Executive Officer determines that toxicity testing shows consistent violation of any acute toxicity limitation identified in Discharge Specification B.2 of this Order, the enrollee shall conduct a TRE that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the enrollee shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specification B.2 of this Order.

Within fourteen days of completion of the TRE, the enrollee shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this Order and to prevent recurrence of violations of those limitations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Executive Officer.

**I. RECEIVING WATER MONITORING (The Executive Officer may require any enrollee with an existing permanent or long term groundwater extraction operation to implement a receiving water monitoring program if such monitoring would be useful in evaluating compliance with this permit and/or additional conditions specified in the authorization letter.)**

**J. SEDIMENT MONITORING (The Executive Officer may require any enrollee with an existing permanent or long term groundwater extraction operation to implement a sediment monitoring program if such monitoring would be useful in evaluating compliance with this permit and/or additional conditions specified in the authorization letter.)**

#### **K. ANNUAL SUMMARY OF MONITORING DATA**

A summary of monitoring data for the past year shall be submitted to the Regional Board prior to January 30 of each year. The report shall contain both tabular and graphical summaries of the previous year's data.

#### **L. PROVISIONS**

All reports submitted in response to this Order shall comply with signatory requirements specified in Reporting Requirement E.12 of this Order.

The enrollee shall implement the above monitoring program on the first day of the month following the effective date of this Order.

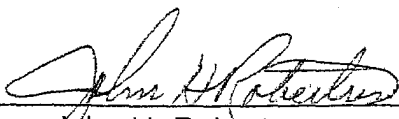
**M. REPORTING FREQUENCY**

Monitoring reports shall be submitted to the Regional Board in accordance with the following schedule:

REPORTING FREQUENCY	REPORT PERIOD	REPORT DUE
Monthly	January*, February March, April, May June, July, August September, October November, December	By the 30th day of the following month*.
Quarterly	January - March April - June July - September October - December	April 30 July 30 October 30 January 30
Semiannual	January - June July - December	July 30 January 30
Annual	January - December	January 30

\* Note: The monthly report for January is due no later than February 28.

Ordered By:

  
John H. Robertus  
Executive Officer  
June 14, 2000



**ENDNOTES****CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**Endnote references for Monitoring and Reporting Program No. 2000-90**, General Waste Discharge Requirements for Temporary Groundwater Extraction Waste Discharges to San Diego Bay and Storm Drains or other Conveyance Systems Tributaries Thereto, San Diego County.

1. Units are as follows:

ml/L=milliliters per liter, mg/L= milligrams per liter  $\mu\text{g/L}$ =micrograms per liter, lb/d=pounds per day,  
GPD=gallons per day  
MPN/ml=most probable number per milliliter

2. Total Chlorine Residual must be monitored if any portion of the dewatering waste stream is chlorinated.

3. Base/Neutral organic compounds are listed in 40 CFR 136.

4. All groundwater dewatering operations and only those groundwater remediation projects involving only diesel fuels shall use the California Department of Health Services recommended analytical procedure contained in the Leaking Underground Fuel Tank Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, October 1989 (LUFT Manual) for determining total petroleum hydrocarbons - diesel concentrations in the discharge unless other analytical methods are specified by the Regional Board. Those groundwater remediation projects involving only gasoline shall use standard analytical techniques contained in the LUFT Manual for the determination of TPH concentration in the discharge unless other methods are specified by the Regional Board.

5. The hexavalent chromium limit may be met as a total chromium limit. If analytical results for total chromium reveal a total chromium concentration greater than the effluent limitations for hexavalent chromium and the sample has not been analyzed for hexavalent chromium, it will be assumed that hexavalent chromium concentrations are in violation of the effluent limitation.

6. Chronic toxicity monitoring for short term groundwater extraction waste discharge operations may be deleted by the Executive Officer.

7. Use USEPA Method Number 624(GCMS) for these constituents. The Executive Officer may waive monitoring requirements for these constituents in cases where the enrollee identifies and requests use of an appropriate "indicator constituent" in lieu of these constituents.

\*\*\*\*\*

**ATTACHMENT A  
ENCLOSED BAYS AND ESTUARIES POLICY  
DISCHARGE PROHIBITIONS**

1. New discharges of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, which are not consistently treated and discharged in a manner that would enhance the quality of receiving waters above that which would occur in the absence of the discharge, shall be prohibited.
2. The discharge of municipal and industrial waste sludge and untreated sludge digester supernatant, centrate, or filtrate to enclosed bays and estuaries shall be prohibited.
3. The deposition of rubbish or refuse into surface waters or at any place where they would be eventually transported to enclosed bays or estuaries shall be prohibited.
4. The direct or indirect discharge of silt, sand, soil clay, or other earthen materials from onshore operations including mining, construction, agriculture, and lumbering, in quantities which unreasonably affect or threaten to affect beneficial uses shall be prohibited.
5. The discharge of materials of petroleum origin in sufficient quantities to be visible or in violation of waste discharge requirements shall be prohibited, except when such discharges are conducted for scientific purposes. Such testing must be approved by the Executive Officer of the Regional Board and the Department of Fish and Game.
6. The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste shall be prohibited.
7. The discharge or by-passing of untreated waste to bays and estuaries shall be prohibited.

**ATTACHMENT B**  
**BASIN PLAN WASTE DISCHARGE PROHIBITIONS**

California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste, or certain types of waste is not permitted. The following discharge prohibitions are applicable to any person, as defined by Section 13050 of the California Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in California Water Code Section 13050, is prohibited.
2. The discharge of waste to land, except as authorized by waste discharge requirements of the terms described in California Water Code Section 13264 is prohibited.
3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredge or fill material permit (subject to the exemption described in California Water Code Section 13376) is prohibited.
4. The discharge of treated or untreated waste to lakes or reservoirs used for municipal water supply, or to inland surface water tributaries thereto, is prohibited.
5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the Regional Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.
6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the enrollee is prohibited unless the discharge is authorized by the Regional Board.
7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner that may permit its being transported into the waters, is prohibited unless authorized by the Regional Board.
8. Any discharge to a storm water conveyance system that is not composed entirely of "storm water" is prohibited unless authorized by the Regional Board. [Federal Regulations 40 CFR 122.26 (b) defines storm water as storm water runoff, snow melt runoff, and surface runoff and drainage.]

9. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.
10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.
11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the state is prohibited.
12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.
13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board.
14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities that cause deleterious bottom deposits, turbidity or discoloration in waters of the state or that unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.
16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.
17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.
18. The discharge of treated sewage from vessels that do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device to portions of San Diego Bay that are greater than 30 feet deep at MLLW is prohibited.

**Attachment C**  
**Standard Provisions**

1. The following sections of 40 CFR are incorporated into this permit by reference:
  - a. 122.5 *Effect of a permit*
  - b. 122.21 *Application for a permit*
  - c. 122.22 *Signatories to permit applications and reports*
  - d. 122.41 *Conditions applicable to all permits*
  - e. 122.61 *Transfer of permits*
  - f. 122.62 *Modification or revocation of permits*
  - g. 122.63 *Minor modifications of permits*
  - h. 122.64 *Termination of permits*
2. *Review and revision of permit.* Upon application by any affected person, or on its own motion, the Regional Board may review and revise this permit. [CWC §13263(e)]
3. *Termination or modification of permit.* This permit may be terminated or modified for causes, including, but not limited to, all of the following:
  - (a) Violation of any condition contained in this permit.
  - (b) Obtaining this permit by misrepresentation, or failure to disclose fully all relevant facts.
  - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. [CWC §13381]
4. *Material change:* Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharge, the enrollee shall submit a technical report describing such changes. Such changes include but are not limited to the following:
  - (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
  - (b) Significant change in disposal method, e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.

- c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
  - (d) Increase in flow beyond that specified in the waste discharge requirements.
  - (e) Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CWC 13372, 13376, 13264, 23 CCR 2210]
  - (f) Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated.
  - (g) Any new discharge of pollutants or new potential pollutant source.
  - (h) Other circumstances which could result in a material change in the character, amount, or location of discharges. [CWC 13372, 13264, 23 CCR 2210]
5. *Transfers*: When this permit is transferred to a new owner or operator, such requirements as may be necessary under the California Water Code may be incorporated into this permit.
6. *Conditions not stayed*: The filing of a request by the Enrollee for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.
7. *Monitoring and Reporting Program*: The Enrollee shall conduct monitoring and submit reports in accordance with Monitoring and Reporting Program (MRP) No. 2000-90. Monitoring results shall be reported at the intervals specified in MRP No. 2000-90. [CWC 13267 & 13383, 23 CCR 2230, 40 CFR 122.43(a), 122.44(l)(4), 122.48]
8. *Availability*: A copy of this Order shall be kept at a readily accessible location and shall be available to on-site personnel at all times.
9. *Duty to minimize or correct adverse impacts*: The enrollee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
10. *Responsibilities, liabilities, legal action, penalties*: The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the Clean Water Act (CWA). [CWC §13385, 13387]

Nothing in this Order shall be construed to protect the enrollee from its liabilities under federal, state, or local laws.

Except as provided for in 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the enrollee from civil or criminal penalties for noncompliance.

Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the enrollee from any responsibilities, liabilities, or penalties to which the enrollee is or may be subject to under Section 311 of the CWA.

Nothing in this Order shall be construed to preclude institution of any legal action or relieve the enrollee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

11. *Noncompliance:* Any noncompliance with this permit constitutes violation of the California Water Code and is grounds for denial of an application for permit modification. [40 CFR 122.41 (a)]
12. *Discharge is a privilege:* No discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights. [CWC §13263(g)]
13. *Permittee:* For the purposes of this permit, the term "permittee" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "enrollee" used elsewhere in this permit.
14. *Director:* For the purposes of this permit, the term "Director" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "Regional Board" used elsewhere in this permit, except that in 40 CFR 122.41(h) & (i), "Director" shall mean "Regional Board, SWRCB, and USEPA."
15. *Effective date:* This Order shall become effective ten days after the date of its adoption provided the USEPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
16. *Expiration:* This Order expires June 14, 2005. [40 CFR 122.43, 122.44(h), 122.46]
17. *Continuation of expired permit:* After this permit expires, the terms and conditions of this permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits are complied with. [40 CFR 122.6, 23 CCR 2235.4]

18. *Applications:* Any application submitted by the enrollee for reissuance or modification of this permit shall satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the California Water Code and the California Code of Regulations.
19. *Confidentiality:* Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the office of the Regional Board.
20. *Severability:* The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this order shall not be affected thereby.
21. *Discharge Monitoring Quality Assurance (DMQA) Program:* Then Enrollee shall conduct appropriate analyses on any sample provided by EPA as part of the DMQA program. The results of such analyses shall be submitted to EPA's DMQA manager. [SWRCB/USEPA 106 MOA]
22. *Pollution, Contamination, Nuisance:* The handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination, or nuisance, as those terms are defined in CWC 13050, is prohibited.
23. *Additional Reporting Requirements:* [40 CFR 122.42(a)] In addition to the reporting requirements under 40 CFR 122.41 (l), all existing manufacturing, commercial, mining, and silvicultural discharges must notify the Regional Board as soon as they know or have reason to believe:
  - (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, of that discharge will exceed the highest of the following "notification levels:"
    - (a) One hundred micrograms per liter (100 µg/l);
    - (b) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
    - (c) The level established by the Regional Board in accordance with 40 CFR 122.44(f).



- (2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
- (a) Five hundred micrograms per liter (500 µg/l)
  - (b) One milligram per liter (1 mg/l) for antimony;
  - (c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - (d) The level established by the Regional Board in accordance with 40 CFR 122.44(f).

24. *Report Submittal:* Reports and other documents required under this Order shall be submitted to:

California Regional Water Quality Control Board  
San Diego Region  
9771 Clairemont Mesa Boulevard, Suite A  
San Diego, California 92124-1324  
Phone - (858) 467-2952  
Fax - (858) 571-6972